30 Mar 97

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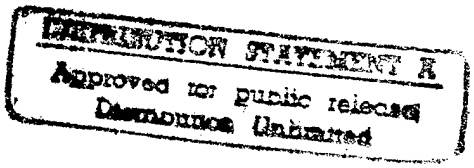
697-9112



Statement of

The Under Secretary of Defense for Acquisition and Technology
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Before the
National Security Subcommittee
of the House Appropriations Committee

on

The FY 1996 DOD Space Program

March 23, 1995

Mr. Chairman, and members of the Subcommittee, I am pleased to appear before you to discuss the Department of Defense space activities in support of the President's fiscal year 1996 budget request.

The United States conducts a variety of activities in space in support of national security objectives. DOD space forces support a wide range of requirements critical to the National Command Authorities, combatant commanders, and operational forces. The global coverage, high readiness, non-intrusive forward presence, and responsiveness of space forces enable them to provide real-time and near-real-time support for the full range of military operations in peace, crisis, and across the entire spectrum of conflict.

SPACE ORGANIZATION AND MANAGEMENT

For the past two years, this Committee has expressed concerns about the Department's organization and management of space activities. These concerns have involved the basic processes governing defense and intelligence space programs and spanned: policy, resources, requirements, acquisition, operations, and support to the war fighter. These concerns did not go unheeded by the Secretary of Defense and other senior DOD management. In response to the specific concerns in last year's appropriations conference report, we initiated a Department-wide review of space organization and management. The review addressed the complete range of national security space activities, including the Department's relationship to the Intelligence Community. The review resulted in a series of recommendations to the Deputy Secretary of Defense and the Director of Central Intelligence last September which laid the foundation for the space management initiatives that I will discuss with you today.

Shortly after my confirmation, the Deputy Secretary directed me to lead an effort within the Department to reach closure on several issues which remained open following last summer's review. Since that time, I have worked closely with the Joint Chiefs of Staff, the Services, other OSD organizations, and the Intelligence Community. The results of this work culminated with the recent approval by the Deputy Secretary of several of my recommendations. While our reorganization plan is not precisely what this Subcommittee proposed, it places the Department on a path to resolve the concerns expressed in the 1995 House Appropriations Committee Report #103-562.

We are taking a two step approach to the management of national security space activities. The first step is to improve the integration and coordination of all DOD space activities. The second step is to extend this coordination and integration to include space activities supporting the Intelligence Community.

In the first step, we have consolidated all space responsibilities and functions within the Office of the Secretary of Defense in a single new organization under a Deputy Under Secretary of Defense for Space (DUSD(Space)) who will report directly to me. The DUSD(Space) will serve as the principal OSD staff assistant and advisor for space matters with responsibility for DOD space policy as well as oversight of space architectures and acquisition programs. In this capacity, the DUSD(Space) will be responsible, among other things, for providing the DOD focal point, interfacing with Congress and other U.S. Government agencies, and representing the Secretary for all interagency deliberations and international

negotiations regarding space matters.

Responsibility for certain space-related responsibilities and functions will be shared among the DUSD(Space), the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence (ASD(C3I)), and the Director, Defense Research and Engineering. With respect to policy, the DUSD(Space) will be responsible for DOD policy and planning guidance for space activities (including non-intelligence uses of national space systems), while the ASD(C3I) will remain responsible for DOD policy for functional C3I activities. With respect to architectures, the DUSD(Space) will oversee the development of an integrated DOD space architecture, while the ASD(C3I) will remain responsible for the Department's functional C3I architecture.

The DUSD(Space) will be responsible for oversight of space acquisition programs. In general, however, the ASD(C3I) will remain responsible for oversight of space system user equipment that is not located in space. Such oversight responsibility may transition from the ASD(C3I) to the DUSD(Space) on an exception basis at the DAB Milestone Zero Review. The DUSD(Space) will have lead responsibility for oversight of mission and user equipment for space systems, e.g. Milstar, where changes to either user equipment or space segment could affect the other, or in cases where such equipment will be acquired only in small numbers. With respect to space technology, the DUSD(Space) will be responsible for assessing future space requirements and recommending changes to space-specific technology goals to the DDR&E. The DDR&E will continue to be responsible for all DOD science and technology activities.

In addition to providing a DOD focal point for space matters, the consolidation of space responsibilities within OSD will facilitate the streamlining of the Department's space policy and acquisition decision making processes. The Secretary of Defense has approved a range of acquisition reform initiatives. What is important to note here is that those reforms will apply, of course, to space acquisition matters. In addition, the Defense Acquisition Board (DAB) structure will be augmented by a Space Committee that will function in an analogous manner to the Strategic, Conventional, and C3I Systems Committees. Integrated Product Teams (IPTs) will support the DAB and Space Committee's review of major defense acquisition programs. IPTs represent an integrated approach to addressing issues by involving all stakeholders early in the process.

The Department's existing planning, programming, and budget system process will not be changed. We plan to establish sub-activity codes in the OSD Budget Reporting System, however, to identify and track funds for all space activities. This will facilitate better management of the Department's resources for space activities. It should also provide Congress greater visibility into the funding for such activities.

The Department will retain a decentralized structure for the acquisition of space programs with existing lines of authority in accordance with Title X, USC. There will be a presumption that the Air Force will be assigned responsibility for the acquisition of DOD multi-user space programs. If another Service believes it is better able to execute that responsibility for a particular program, then it will have the opportunity to makes its case to the Defense Acquisition Executive who will assign responsibility for the program. Acquisition responsibility for Service-unique space programs, e.g., ground terminals and other user equipment, will remain with the Services.

Finally, we plan to establish a DOD Space Architect who will be responsible for developing an integrated defense space architecture and coordinating with his or her counterpart in the Intelligence Community. The DOD Space Architect function will be executed by the Air Force, with the office director an Army, Navy, Air Force, or Marine Corps 0-8 flag officer chosen from those nominated by the Services. Selection of the DOD Space Architect will be approved by the Defense Acquisition Executive. The DOD Space Architect will report to me through the Air Force Acquisition Executive for a two-year tour. The staff will be comprised of representatives from the Services and Defense Agencies. The Deputy Secretary of Defense has tasked the Secretary of the Air Force to take the lead for developing, with full participation of all Services, the Joint Staff, and U.S. Space Command, the plan for executing the DOD Space Architect function. We anticipate that the DOD Space Architect function will be established within the next few weeks.

As noted above, the second step in our approach to the management of national security space activities involves improving the integration and coordination of defense and intelligence space activities. The Secretary, Deputy Secretary, and I recognize this second step is essential to address the fundamental concerns expressed by Congress about space organization and management. We believe that this step can be best accomplished, however, once a new Director of Central Intelligence is in place. Besides the joint reviews currently conducted by the Deputy Secretary and Director of Central Intelligence, we have identified a forum, the Joint Space Management Board, for senior management to address defense and intelligence space policy, acquisition, architecture, funding, and related issues. In addition, we envision a consolidation of the defense and intelligence space architecture functions into a single national security space architect. I am committed to reaching agreement on this matter with the Director of Central Intelligence as soon as possible. I trust that at this time next year I will be able to provide you with the details of that agreement.

I would like to turn now to the programmatic aspects of the President's Fiscal Year 1996 space activities. We have a number of forces structure and modernization initiatives that reflect both new directions and a new way of doing business.

SPACE TRANSPORTATION

Medium Launch Vehicles

The Medium Launch Vehicle (MLV) program is a key to the DOD mission of maintaining assured access to space. This robust mix of expendable launch vehicles, consisting of the Atlas E Titan II, Delta II, and Atlas II have proven to be dependable workhorses in launching DOD and National User payloads. The Delta II has successfully placed the Global Positioning System (GPS) Block II/IIA satellites into their proper orbits thereby completing the global navigation constellation. Since February 1992, the Atlas II program has successfully launched four Defense Satellite Communications System (DSCS) Block III satellites to maintain our global communications network. In the future, the MLV program will launch the GPS Block IIR satellites, four more DSCS satellites, a Space Test Program satellite, National User payloads, and will continue to support NASA launch operations.

Our strategy is to make only modest investments in these systems for flight safety and to reduce cost where we can realize a near-term savings. We have no plans to refurbish additional Titan II's beyond the original fourteen under contract. At this time we have firm requirements for six of the Titan II's in addition to the five already flown which leaves a balance of three unassigned. We plan to fly out the six by 1999, with two launches planned in fiscal 96 in support of NOAA and DMSP, and then shut down the Titan II operation. Delta and Atlas will continue to be prime launch vehicles through the early part of the next decade until we can transition to the MLV class of the Evolved Expendable launch Vehicle or EELV in 2001.

Titan IV

Until the heavy-lift EELV capability comes on line to support National User payloads after 2005, Titan IV remains this Nation's only capability to place our highest priority, heaviest payloads into polar and geosynchronous orbit.

As a result of a Defense Acquisition Board program review last year, the size of the program was reduced from 65 vehicles to 47. I plan to review the acquisition strategy for the follow-on buy, vehicles 42 and beyond, later this year. The Air Force plans to award a contract for the follow-on program in fiscal year 1997. I believe this additional buy of six vehicles will be adequate to get us through the transition to the heavy-lift version of the EELV, but I would like to preserve the option to add additional Titan IV vehicles beyond the six planned as a prudent hedge against the EELV schedule. My intent, however, is not to ever have to execute that option. The Air Force plans to award a contract for follow-on launch operations and issue the request for proposal for the follow-on production in FY 1996. Mission assurance and cost reduction are the major focus of the acquisition strategy for the follow-on buy beginning in FY 97. This strategy also reflects an overall reduction of $2.1 billion for the Titan program in the FYDP based on a bottom-up cost estimate of the program, as well as future cost

reduction initiatives primarily associated with launch operations at the Cape and Vandenberg.

In fiscal year 96 we plan to launch four Titan IVs, one at Vandenberg and three at the Cape. We will also launch the first Titan IVB booster with the solid rocket motor upgrade. This Titan IVB reflects a major improvement in the Titan IV program which should result in cost savings and launch flexibility. Titan IVB is essentially a new launch vehicle from an electronics viewpoint with upgraded solid rocket motors for improved reliability and performance, as well as a common core with standard mechanical and electrical interfaces.

Evolved Expendable Launch Vehicle

The next part of our launch vehicle strategy involves the replacement for the current systems. We have recently issued a draft request for proposal (RFP) for the Evolved Expendable Launch Vehicle or EELV. The number one objective of this program is to reduce cost. This program is one of the recent examples of what we in the Department are doing about acquisition streamlining. I first reviewed the Air Force EELV plan on February 16 and approved their overall concept and directed they prepare for a DAE review. That review is currently scheduled next month. Clearly, not business as usual. The EELV acquisition plan calls for three phases. The first is a 15-month risk reduction phase where we will award multiple contracts to primes. At the end of this phase we will down select to two and enter a 13-month pre-engineering and manufacturing development phase. At the end of that phase we will down select to one and enter the EMD phase. Prior to entry into each of the phases I will hold a DAE review.

As I am sure you are aware, the Secretary was directed to provide two reports to the Congress regarding EELV. One deals with the use of Russian technology and the other a detailed plan describing the proposed development program for the new family of expendable launch vehicles. The Department policy on the use of Russian technology for EELV is currently in coordination within the Department. It is our intent to forward this policy to the Congress within the next few weeks. As reported in the press, the basic tenet of the policy is a "no dependence" clause. We will require that within four years of final contract award, U.S. industry must develop an in-house production capability. This period of time is consistent with the continued production capability of current systems so that we maintain a fall-back if for whatever reason we cannot produce the engines within the US.

The detailed plan describing the EELV program is currently in coordination. I expect it to be forwarded to the Congress soon after the program review next month.

Reusable Launch Vehicle Technology

The third part of our launch strategy deals with the department's role in the NASA Reusable Launch Vehicle (RLV) program. The President's National Space Transportation Policy states that NASA's efforts associated with technology development and demonstration, including operational concepts, will be implemented in cooperation with related activities in the Department of Defense. The DOD Implementation Plan in response to this policy, approved by the Deputy Secretary last November, acknowledges the fact that there are Department equities in the NASA activity and requires the DOD to maintain an interest in reusable space launch technology, and coordinate this activity with NASA's reusable technology programs.

In support of that direction, the Department has coordinated with NASA the spending of the appropriated fiscal year 1994 funds. We will focus our efforts in the areas of structures, propulsion, and test operations. The Department has no plans to invest in mainstream program activities such as demonstrator vehicles. I believe those are clearly under NASA's purview.

I would now like to turn to a discussion of a number of our major satellite initiatives.

SATELLITE SYSTEMS

Convergence

DOD has begun a long-term partnership with the National Oceanic and Atmospheric Administration (NOAA) and NASA in development of the National Polar-orbiting Operational Environmental Satellite System (NPOESS). This cooperative effort is one of the successes of the Administration's National Performance Review and will provide the follow-on capability to both the Defense Meteorological Satellite Program and the NOAA Polar-orbiting Operational Environmental System. As such, NPOESS will satisfy both civil and national security operational requirements for collection and dissemination of space-based global environmental (meteorological, climatic, oceanographic, and solar-geophysical) data.

In accordance with the May 1994 Presidential Decision Directive NSTC-2, we have already converged the two DOD and NOAA follow-on programs into a single national program and have established an Integrated Program Office (IPO) in Silver Spring, MD. NOAA is the lead agency for NPOESS, to include support to the IPO for satellite and ground segment operations; DOD has lead agency responsibility to support the IPO in the NPOESS acquisition; and NASA has lead agency responsibility to support the IPO in facilitating transition of new cost-effective technologies. All agencies are responsible to a tri-agency Executive Committee for NPOESS success--I am the DOD representative to this EXCOM.

There is also an international cooperative aspect to NPOESS. A satellite flown by the European Organization for the Exploitation of Meteorological Satellites (EUMETSAT) may also be utilized to support some NPOESS requirements. A tri-agency team (with NOAA in the lead) is currently negotiating an agreement with EUMETSAT that defines the initial phase of this support. We have been working closely with NOAA to ensure DOD mission requirements are met by the European satellite and are very encouraged by the progress to date. We anticipate concluding this agreement by December. DOD is firmly committed to NPOESS and looks forward to the opportunities both the interagency and international cooperation provide.

Navstar Global Positioning System (GPS)

Navstar GPS is a space-based positioning and navigation system designed to provide worldwide, all weather, three-dimensional, position, velocity and timing data to a variety of US and allied military users. GPS provides a military accuracy of 16 meters and a variable civilian accuracy set to 100 meters in peacetime.

GPS proved of enormous military war fighting value in Desert Storm, as well as in subsequent military humanitarian and support actions in Somalia, Bosnia, and Haiti. In Desert Storm, GPS was largely responsible for the swiftness and precision of our force movements and for the relative safety with which they were conducted. Since Desert Storm, the DOD has accelerated procurement of GPS equipment and has continued to broaden its applications to a wide variety of military missions.

The fully operational constellation of twenty-four GPS satellites was completed in March 1994 and continues to operate, under the control of the Air Force, at an extremely high level of availability. Operational testing was conducted by the DOD during the remainder of 1994, and Full Operational Capability for the system will soon be declared. Launch of operational GPS satellites (Block II) began in February 1989, and four remain to be launched as replacements for any of the early satellites that may fail prior to availability of the replenishment block of satellites (Block IIR) in late 1996. Twenty one Block IIR satellites are being procured to sustain GPS coverage through 2001. Planning for continued sustainment has been underway for some time, and a Request for Proposals is being readied for release this year to provide GPS follow-on satellites (Block IIF) beyond 2001.

In addition to its military utility, GPS is proving to be of tremendous benefit to civilian users in virtually all areas of public and private transportation and commerce. The DOD actively participates with Federal civil agencies such as the Department of Transportation and the National Aeronautics and Space Administration, among many others, to facilitate the widest possible use of GPS for peaceful civil purposes.

Early Warning: Space Based Infrared System (SBIRS)

Another area where we have made substantial progress is in the area of missile launch detection capabilities. There were serious concerns about the fielding and cost for the program proposed last year. We conducted a major study over the summer to select the future replacement for the Defense Support Program which is currently the primary means for initial warning of ballistic missile launches.

A Senior Steering Group (SSG) composed of appropriate DOD and national organization representatives was convened under the auspices of the Deputy Assistant Secretary of Defense for Intelligence and Security to undertake a comprehensive examination across all applicable DOD and national mission areas. The SSG was supported by three working groups: requirements, architectures, and programmatics.

This review expanded the space-based infrared satellite solution to missions other than early warning, encompassing missile defense, technical intelligence, and a new mission area, battle space characterization. Multiple hardware alternatives were reviewed to ensure that critical user needs could be met across all mission areas. The previously programmed systems, namely ALARM (Alert, Locate, And Report Missiles), Brilliant Eyes, and Gapfiller (replacement for the DSP-Augmentation system), were rejected due to their inability to meet some of these critical requirements. Instead, a new program was created which consolidates those activities under an SBIRS Architecture. This new program will attain an Initial Launch Capability sooner (FY 2002 vice FY 2004) and will provide a more capable and flexible approach at lower cost than the systems previously programmed.

I reviewed this program on February 6 and approved the system acquisition strategy and program baseline, as well as the coordinated management approach. I also approved entry into the pre-EMD phase for the High System part of SBIR. Our plan is to address the high portion of the overall SBIR architecture now, that is the two Highly Elliptical Orbit satellites and the four geosynchronous satellites and associated ground infrastructure. We will make the deployment decision for the Low Earth Orbit satellites at the end of the decade.

Milstar

The Milstar satellite system is planned to provide operational forces -- especially highly mobile tactical units -- with secure, survivable, flexible communications on a world-wide basis. The Milstar system operates in a currently under utilized part of the radio spectrum -- Extremely High Frequency (EHF). This attribute plus other design features, like advanced signal processing and cross links, provide unique mission capabilities -- capabilities required by today's war fighters for power projection into possible theaters of conflict around the globe.

The Department restructured the Milstar program extensively four years ago, at Congressional urging, to reduce costs and to account for changes in the international and national security environments. Requirements for a classified payload were deleted. "Heroic" survivability features envisioned for the Cold War environment were eliminated. The number of satellites and ground control elements were reduced commensurate with the threat and force structure reductions.

A higher capacity, Medium Data Rate or MDR payload is being developed for the second generation Milstar II satellite which expands its tactical utility. This MDR payload will greatly increase communications capacity compared to the Low Data Rate (LDR) capabilities on the initial Milstar I satellites. Use of both LDR and MDR will greatly enhance the utility of Milstar II satellites in a wide range of future scenarios.

The restructured Milstar program also reduced the numbers of strategic terminals and defined new mobile terminals for tactical users. It reduced program life cycle costs by approximately 25 percent. We reviewed the program in 1992 under the context of a DAB for this restructured system and then again in 1993 as a portion of the Bottom-Up Review (BUR). In both reviews we continued to reduce the program and have now arrived at a system design which represents a savings of nearly 50% versus the program defined back in 1991.

The current program, comprised of two Milstar I satellites and four follow-on, Milstar II satellites is the result of extensive analysis during the BUR and retains solid support from all sectors of the DOD. And

I'm happy to report the program is succeeding admirably. The first Milstar I satellite was launched last year and has undergone initial IOT&E very successfully. We used a planned break in testing to support our forces during Operation Restore Democracy in Haiti. Using prototype terminals we had already procured, the Army forces on the ground were able to talk directly to the deployed command ship and their home base anytime, without any dependence on terrestrial infrastructure. The satellite is now in final IOT&E.

The second satellite is scheduled for launch later this year and everything looks great at this time. We also completed a very successful critical design review on the MDR package. Finally, we placed the last two Milstar satellites, numbers 5 and 6, on contract.

The Milstar terminal programs are proceeding along as well. The Air Forces command post terminal and the Navy EHF terminal programs were largely unaffected by the changes in the satellite design and have been in production for some years. Installation operations are proceeding smoothly. We revamped the Army terminal program after the Milstar program was redefined, initiating two new efforts following the 1992 DAB: the Single Channel Anti-Jam Man Portable (SCAMP) terminal and the Secure Mobile Anti-Jam, Reliable Tactical Terminal (SMART-T). Through last year both developments were on track and below their program baseline budgets.

Unfortunately, the Army SATCOM Ground Environment budget took a large cut, 50% of its RDT&E, in the FY 95 appropriations bill - a cut aimed squarely at these two efforts. We judged it overly risky to proceed with both development programs on a reduced budget so we had to make a tough choice. The Army worked with industry, the rest of the Milstar team, and OSD to fashion a new strategy that would minimize the effect of the cut. They arrived at a solution that terminated the SCAMP development effort and instead cast it as a competitive production effort. The new strategy retains the previous schedule for terminal production although we've had to accept slightly increased program risks and reduce some of the baseline requirements.

Defense Satellite Communications System (DSCS)

DSCS remains an integral part of our Military Satellite Communications (MILSATCOM) architecture and will continue to be for years to come. The DSCS system includes a space segment of five fully capable and several partially capable satellites, a terminal segment of approximately 635 fixed, transportable, and mobile terminals, and a control segment of five fixed DSCS Operations Control Centers. The current constellation consists primarily of DSCS III's with two remaining DSCS II's providing residual capability. We still have five DSCS III's in storage and one getting ready to launch this summer.

We told you last year that we believed that we had sufficient DSCS satellites to maintain the health of the constellation through the middle of the next decade. We still believe that estimate to be true. This year we have also begun a study to determine if the service life of those assets could be extended even longer. If so, that extension could yield added flexibility and savings in structuring our replenishment programs for the future. I'll say a little more on that future architecture in a moment, but first let me turn to our UHF constellation.

UHF Follow-On (UFO)

The UHF Follow-On system provides replacement satellites for our FLTSAT and LEASAT communications satellites. You'll remember that the Navy used an innovative commercial type of contract to buy these satellites, delivered on-orbit. I'm happy to report that, thus far, the program has been a success.

Despite the failure of the first launch, we've had three subsequent successful deliveries. We recovered the cost of the first lost satellite from the contractor and have used the money to buy a replacement, satellite number 10. The first satellite with EHF capability was launched just two months ago and it is checking out quite well. We intend to continue to use these innovative methods when appropriate in the space communications arena, and in the DOD at large, to reduce the cost of ownership for our military

systems.

We are also involved in a number of study efforts in the communications areas that will shape our future SATCOM architecture and I'd like to spend a few moments talking about them.

International Military Satellite (INMILSAT) Study

The first is the INMILSAT effort. In a January 1991 letter, the French suggested examining the possibility of collaboration on the next generation of SHF communication satellites and in a June 1991 response, the DEPSECDEF agreed to examine the concept. INMILSAT studies were conducted in three phases over the last three years. During the first two phases of the study we reached the conclusions that a cooperative development had the potential to yield both fiscal and political benefits and that further study of specific design concepts was warranted.

The phase 3 studies were conducted by eight contractor consortiums in three countries (4 in the US, 2 in the UK and 2 in France) over the last year. Several design options were examined. Some had SHF capability only, which is our preferred alternative, and others with varying amounts of both SHF and EHF, which our allies prefer. We plan to make a decision later this year on whether any of these design can fit into the architecture we are developing. We remain hopeful that an acceptable program can be crafted that meets the combined needs of ourselves and our allies.

Commercial Satellite Communications Initiative (CSCI)

At the urging of Congress in 1992, we began the Commercial Satellite Communications Initiative to investigate ways which the DOD could more effectively, and more inexpensively, make use of the substantial on-orbit commercial communications capacity to lessen our reliance on military systems. The first outgrowth of that study was the Department's 1993 policy on the use of commercial SATCOM which was described to this committee last year.

This year we've gone a step further. We began a source selection for the leasing of at least two commercial transponders as a trial run for the new policy. We expect a contract to be awarded shortly as a result of that effort. This initial effort is small, and will be closely watched. Let me emphasize that this program has approached commercial service from a heretofore unexplored direction. One of the problems you've heard us talk about regarding commercial communications in the past is the fact that we were unable to guarantee the deployed war fighter priority on a commercial system, nor could we rapidly re-configure our usage to the best operational advantage. Those problems were due to the fact that we did not control the communications network, we simply leased a point-to-point connection.

Under the CSCI we've changed that philosophy. Here, we are going out to lease transponders, not connections, on more than a single satellite and from the system owner, not from the communications service provider. We can then, in effect, set up our own ÒcommercialÓ network which we control. We'll integrate control for that DOD network parallel to our DSCS network control. That way, we can have a rapid and coordinated transfer of services between our CSCI network and our military SHF system.

Now this is not to say that commercial SATCOM is a panacea. Many of the old problems still exist; landing rights, jam resistance, and tactical utility to name just a few. And although our studies validated the cost efficiency of this approach, the savings accrue only with high transponder usage. This initial foray into the field will help us gain insight into the applicability of this approach across other areas of the DOD.

Satellite Communications Architecture Planning

Last year, the Congress tasked us to develop a satellite communications master plan to address the issues involved in evolving our current SATCOM systems to a future architecture. You recognized, as we did, that all of the systems I discussed earlier, Milstar, DSCS, and UFO would be up for replacement around the same time frame. That presented us an opportunity, and a challenge, to plan for a cost efficient coordinated transition instead of being forced to simply replace each constellation as it expired.

We've spent the last nine months working on that plan, examining a multitude of options and engaging experts from both within and outside the DOD. The plan is in coordination today and I expect to deliver it to you on schedule at the end of May. Some of the fruits of that labor are already apparent and have impacted the budget we put together this year. I have already mentioned the DSCS service life extension study. We have undertaken it to make sure we have the option of extending that constellation beyond its programmed years.

Looking further into the budget you'll note that we've moved the dollars associated with both the DSCS follow-on and the Milstar follow-on, along with the advanced EHF technology efforts, and consolidated them into a single Advanced MILSATCOM line. Lastly, in January, I formally separated the Advanced EHF program from the Milstar program. All these actions reflect our maturing vision of how we will replace the communications capability represented by the heritage systems, as opposed to how to replace the satellites themselves. Our plan is to layout a coordinated program that fully accounts for the growth in requirements as well as recognizes the fiscal challenges in trying to replace all our capabilities at the same time. I can't tell you today what that architecture will look like, but I would be glad to share that with you as soon as it is available.

SUMMARY

Space forces are fundamental to modern military operations. They are playing a central role in the ongoing revolution in warfare because of their unique capabilities for gathering, processing, and disseminating information. In particular, space systems provide force multipliers that are increasingly important for sustaining an effective level of U.S. defense capability as overall force structure is downsized and restructured. The space management, force structure, and modernization initiatives I have presented to you today will help to ensure that DOD space forces will retain the capability and versatility to accomplish their missions effectively and efficiently in support of national security strategy and national military strategy.

This concludes my formal remarks. I would be happy to answer your questions at this time.